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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,063	12/27/2001	Gerhard Niedermair	449122019600	1764

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MORRISON & FOERSTER LLP  
1650 TYSONS BOULEVARD  
SUITE 300  
MCLEAN, VA 22102

EXAMINER

ARMSTRONG, ANGELA A

ART UNIT	PAPER NUMBER
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2626

DATE MAILED: 08/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/019,063	<b>Applicant(s)</b> NIEDERMAIR, GERHARD	
	<b>Examiner</b> Angela A. Armstrong	<b>Art Unit</b> 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 12, 2006, has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-4 and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Junqua et al (US Patent No. 6,684,185) in view of Shaw (US 2002/0013707).

4. Regarding claim 1, Junqua discloses a method for speech processing comprising converting an orthographic input into a phonetic transcription in a first conversion step at col. 3, lines 38-57; a second step of converting from the phonetic transcription into a pseudo-orthographic representation and outputting in this representation at col. 4, lines 3-22 and 37-40; col. 5, lines 33-37. Additionally, Junqua discloses the second conversion comprises a conversion of phonetic word units into simple graphemic script units at col. 3, line 38 continuing to col. 4, line 37 and col. 7, lines 8-65. Junqua does not teach analyzing the output pseudo-orthographic representation to determine if the orthographic input was correctly converted. Shaw discloses a system for developing word pronunciation pairs for use in a

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speech recognition system, in which an editing tool is provided for developing word-pronunciation pairs based on a spelled word input. The editing tool includes a transcription generator that receives the spelled word input from the user and generates a list of suggested phonetic transcriptions. The editor displays the list of suggested phonetic transcriptions to the user and provides a mechanism for selecting the desired pronunciation from the list of suggested phonetic transcriptions.

It would have been obvious to one of ordinary skill at the time of the invention to modify the system of Junqua to display the transcriptions to the user to have the user select the desired pronunciation, for the purpose of ensuring that user specific words or phrases are transcribed to reflect the user's desired characteristics.

Regarding claim 2, Junqua discloses a third step of converting an input performed in the pseudo-orthographic representation into the phonetic transcription at col. 4, line 62 continuing to col. 5, line 32.

Regarding claim 3, Junqua discloses conversion of phonetic word units into simple grapheme script units at col. 3, line 38 continuing to col. 4, line 37.

Regarding claim 4, Junqua discloses conversion step executed by accessing a stored phoneme/grapheme assignment table at col. 7, lines 8-65.

Regarding claims 6-9, claims 6-9 are apparatus claims similar in scope and content to method claims 1-4 and therefore are rejected under similar rationale.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Junqua in view of Shaw and further in view of Molnar et al (US Patent 6,411,932).

6. Regarding claim 5, Junqua does not teach the implementation of a neural network as a machine-learning/ self-learning technique for obtaining phonetic information. However, implementation of a neural network technique to acquire phonetic information was well known in the art. Molnar teaches a learner technique using a neural network to form pronunciation guesses for words in a training set and for finding a transformation rule that improves the guesses (Figure 15, col. 5, lines 4-21) and specifically teaches the system can produce good pronunciations or transcriptions for word not in a training set (col. 5, lines 43-50).

It would have been obvious to one of ordinary skill at the time of the invention to modify the system of Junqua to implement a neural network in the phonetic transcription system, as suggested by Molnar, for the purpose of producing transcriptions or pronunciations of new words or words not a part of the original vocabulary or grammar, as also suggested by Molnar.

***Response to Arguments***

7. Applicant's arguments have been fully considered but they are not persuasive. Applicant argues it would not have been obvious to modify the system of Junqua with the teachings of Shaw and further argues that the recited method is not disclosed by the applied prior art. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

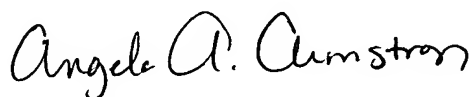
In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela A. Armstrong whose telephone number is 571-272-7598. The examiner can normally be reached on Monday-Thursday 11:30-8:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 571-272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Angela A Armstrong  
Primary Examiner  
Art Unit 2626

AAA  
July 24, 2006